

# Synthesis

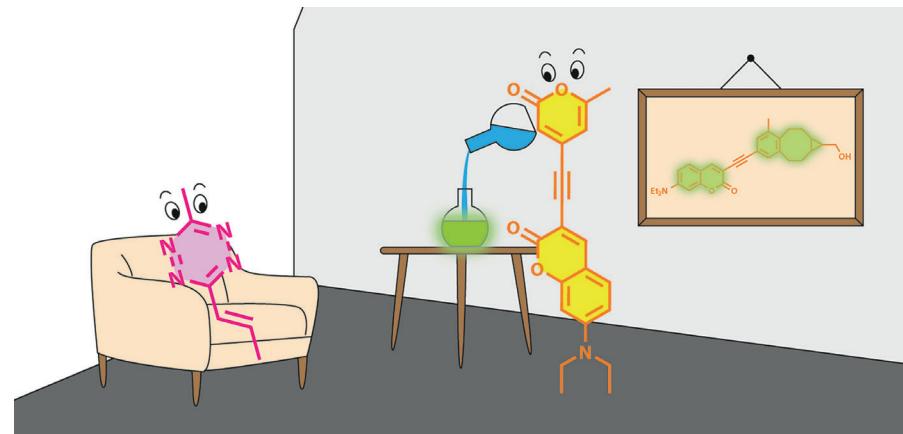
Reviews and Full Papers in Chemical Synthesis

September 1, 2022 • Vol. 54, 3667–3905

## Special Section

*dedicated to Prof. Ferenc Fülöp*

*Guest editor: Loránd Kiss*



Beyond the Bioorthogonal Inverse-Electron-Demand Diels–Alder Reactions of Tetrazines: 2-Pyrone-Functionalized Fluorogenic Probes

G. B. Cserép, K. Németh, Á. Szatmári, F. Horváth, T. Imre, K. Németh, P. Kele

17



Thieme

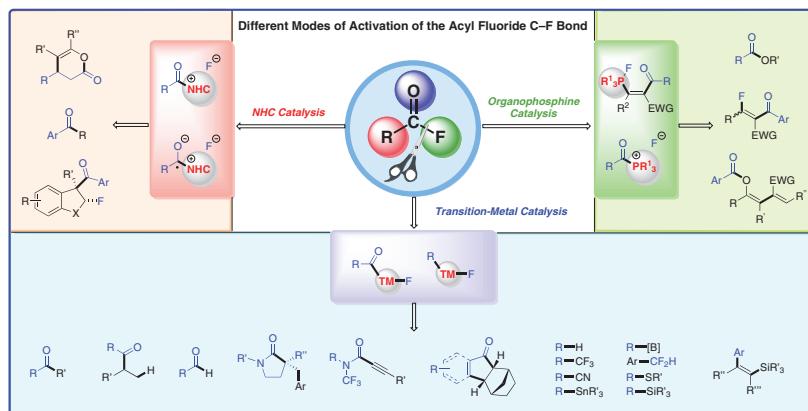
**Synthesis**

Synthesis 2022, 54, 3667–3697  
DOI: 10.1055/a-1845-3810

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## Recent Advances in C–F Bond Activation of Acyl Fluorides Directed toward Catalytic Transformation by Transition Metals, N-Heterocyclic Carbenes, or Phosphines

Review  
3667



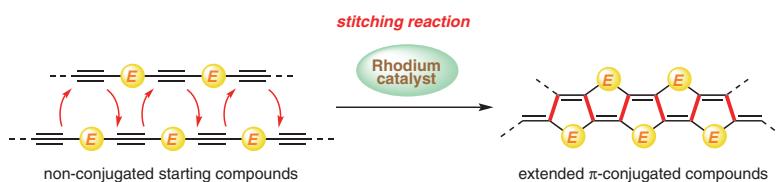
**Synthesis**

Synthesis 2022, 54, 3698–3707  
DOI: 10.1055/a-1828-2367

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## Rhodium-Catalyzed Stitching Reactions for the Facile Synthesis of Extended $\pi$ -Conjugated Compounds

Short Review  
3698



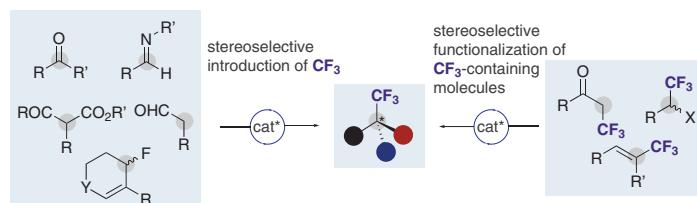
**Synthesis****Catalytic Asymmetric Construction of CF<sub>3</sub>-Substituted Chiral sp<sup>3</sup> Carbon Centers****Short Review**

3708

*Synthesis* 2022, 54, 3708–3718  
DOI: 10.1055/a-1833-8813

K. Hirano\*

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**Synthesis****1,1-Difunctionalization of  $\alpha$ -Carbonyl Sulfur Ylides with Thiosulfonates: Synthesis of  $\beta$ -Keto Thiosulfones****Feature**

3719

*Synthesis* 2022, 54, 3719–3728  
DOI: 10.1055/a-1811-8503

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**Synthesis****Rhodium(I)-Catalyzed Regioselective C–H Alkenylation of 2,2'-Bipyridine Derivatives with Alkynes****Feature**

3729

*Synthesis* 2022, 54, 3729–3738  
DOI: 10.1055/a-1790-0869

J. Yu

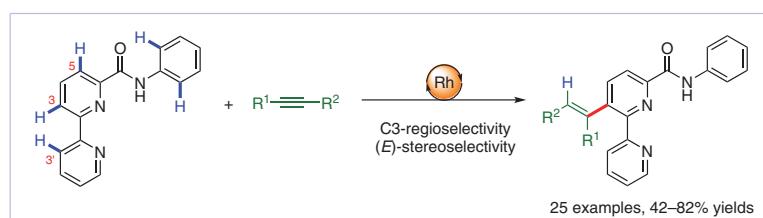
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**Synthesis**

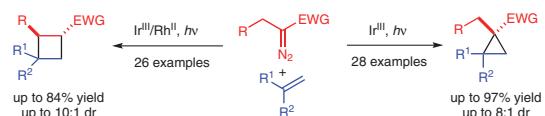
*Synthesis* 2022, 54, 3739–3752  
DOI: 10.1055/a-1786-6496

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**Visible-Light-Induced Catalysis: A Regioselectivity Switch between [2+1] and [2+2] Cycloaddition of Diazocarbonyls with Olefins****Feature**

3739

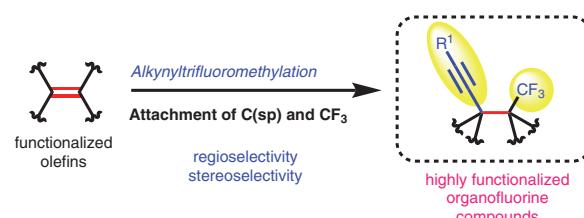
**Synthesis**

*Synthesis* 2022, 54, 3753–3760  
DOI: 10.1055/a-1811-8679

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**Developments in the Alkynyltrifluoromethylations of Alkenes and Alkynes****Special Topic**

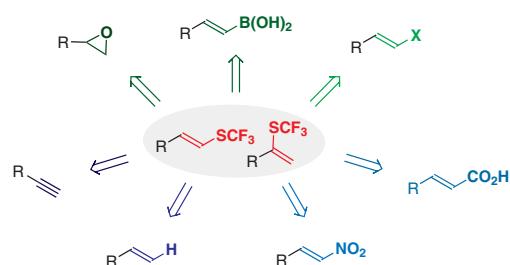
3753

**Synthesis****Direct Synthesis of Disubstituted Trifluoromethylthiolated Alkenes****Special Topic**

3761

*Synthesis* 2022, 54, 3761–3770  
DOI: 10.1055/s-0040-1719891

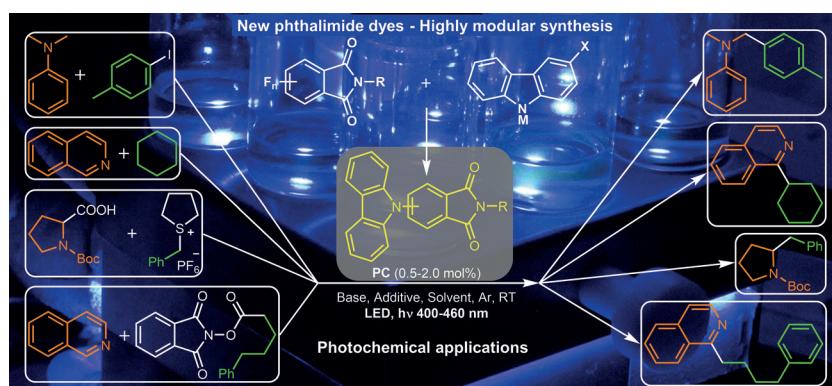
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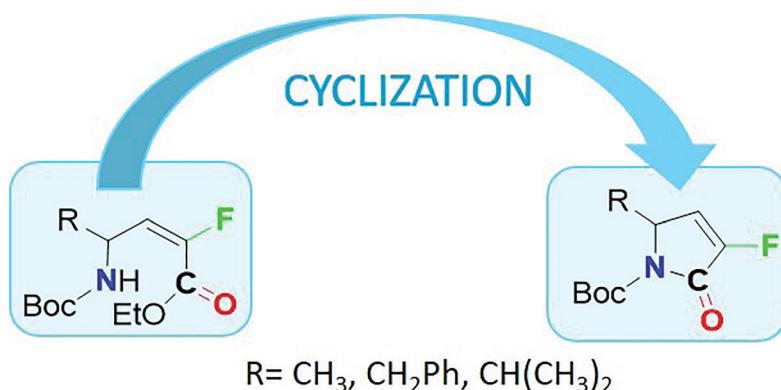
## Modular Synthesis of Carbazole-Substituted Phthalimides as Potential Photocatalysts



K. Salamon-Krokosz  
M. Gołdyn  
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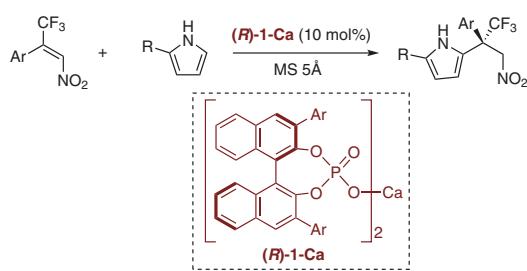
## Fluorinated Olefinic Lactams: The Case of Amino Acids – Preparation and Mechanistic Studies



T. Uchikura  
S. Yokohama  
M. Murakami  
T. Akiyama\*

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## Chiral Calcium Phosphate Catalyzed Enantioselective Synthesis of All-Carbon Quaternary Center by Friedel-Crafts Alkylation Reaction of Pyrroles and Trifluoromethylated Nitrostyrenes

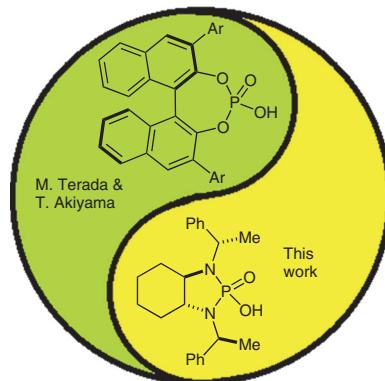


**Synthesis****On the Synthesis of a Novel Chiral Phosphorodiamidic Acid Containing the  $\alpha$ -Phenylethyl Moiety: Insights on its Conformation and Reactivity****Special Topic**

3801

*Synthesis* 2022, 54, 3801–3808  
DOI: 10.1055/a-1689-3626**C. Cruz-Hernández\*****E. Juaristi\***

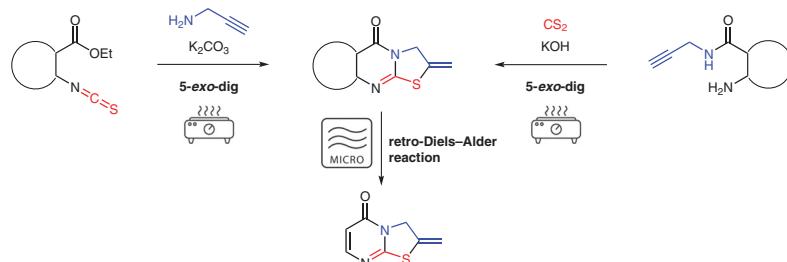
Centro de Investigación y de Estudios Avanzados, México

**Synthesis****Synthesis of Alicyclic 2-Methylenethiazolo[2,3-*b*]quinazolinone Derivatives via Base-Promoted Cascade Reactions****Special Topic**

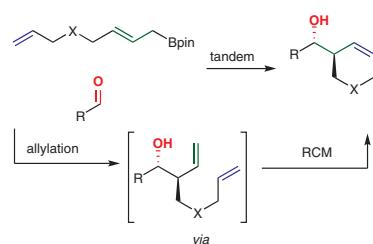
3809

*Synthesis* 2022, 54, 3809–3816  
DOI: 10.1055/s-0040-1720028**M. El Haimer****T. Faragó****Z. Schelz****I. Zupkó****M. Palkó\***

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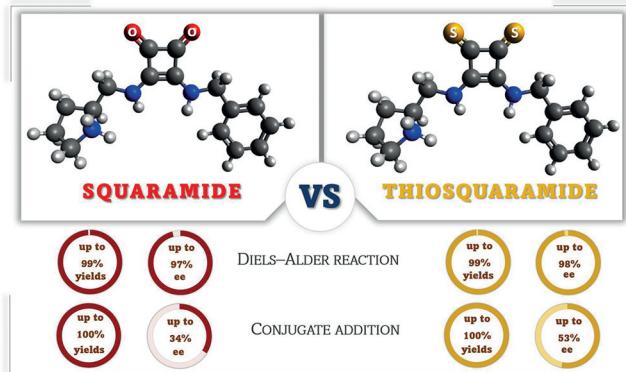
**Synthesis****Heteroatom-Tethered  $\omega$ -Alkenylallylboronates: Stereoselective Synthesis of Heterocyclic Derived Alcohols****Special Topic**

3817

*Synthesis* 2022, 54, 3817–3822  
DOI: 10.1055/s-0040-1719890**F. Garnes-Portolés****R. Miguélez****M. N. Grayson****P. Barrio\***Universidad de Valencia, Spain  
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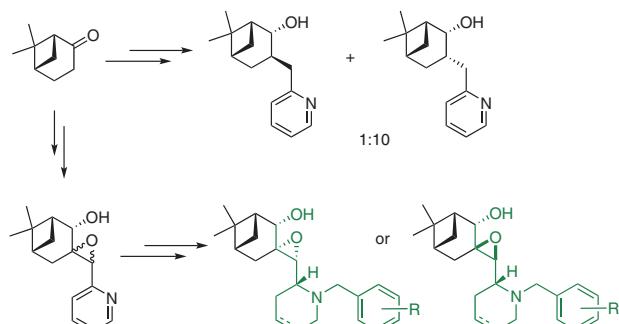
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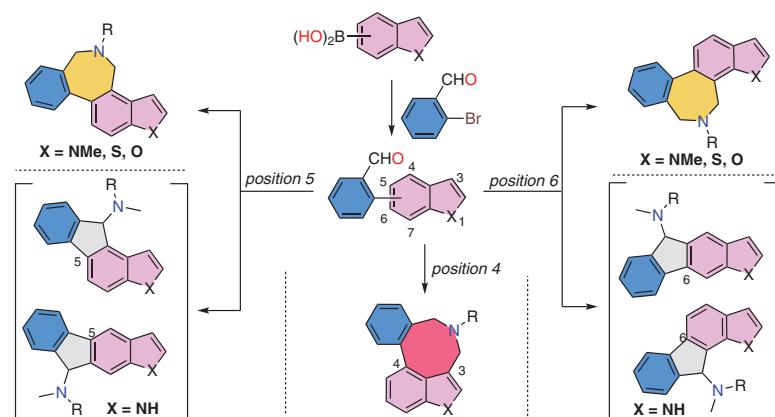
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Expressed cytotoxic activity was observed on MDA-MB-231, MCF-7, and A2780 human cancer cell lines

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**Synthesis**

*Synthesis* 2022, 54, 3858–3866  
DOI: 10.1055/a-1761-4672

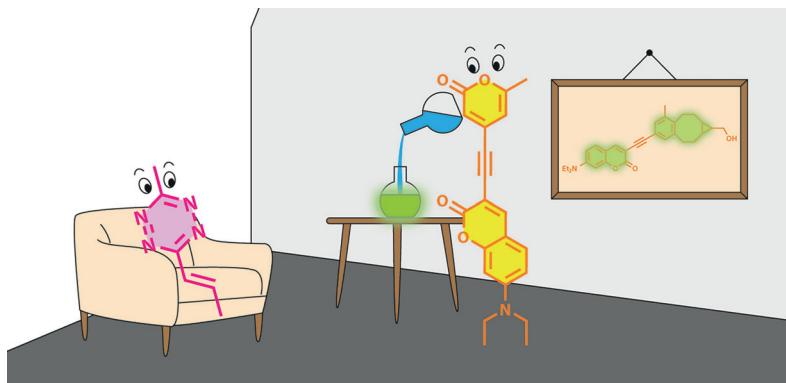
**Beyond the Bioorthogonal Inverse-Electron-Demand Diels–Alder Reactions of Tetrazines: 2-Pyrone-Functionalized Fluorogenic Probes****Special Topic**

**OPEN**  
**ACCESS**

3858

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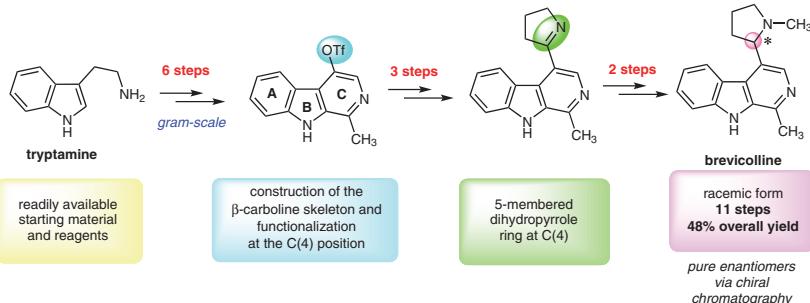
*Synthesis* 2022, 54, 3867–3873  
DOI: 10.1055/s-0041-1737830

**Synthesis of Racemic and Enantiopure Forms of  $\beta$ -Carboline Alkaloid Brevicolline****Special Topic**

3867

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**Synthesis**

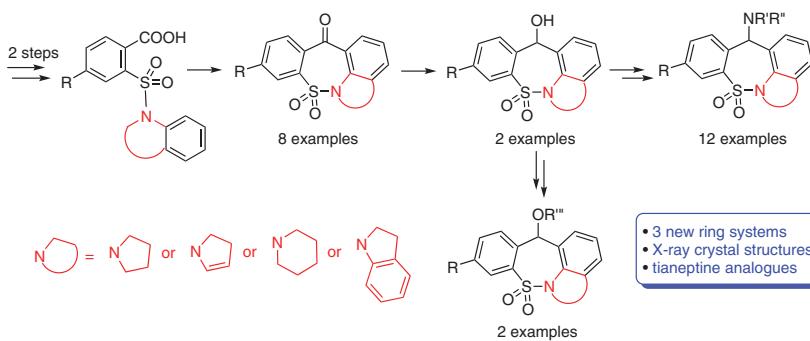
*Synthesis* 2022, 54, 3874–3882  
DOI: 10.1055/s-0040-1719885

**Towards Tianeptine Analogues: Synthesis of New Ring Systems Containing a Dibenzo[c,f][1,2]thiazepine S,S-Dioxide Core****Special Topic**

3874

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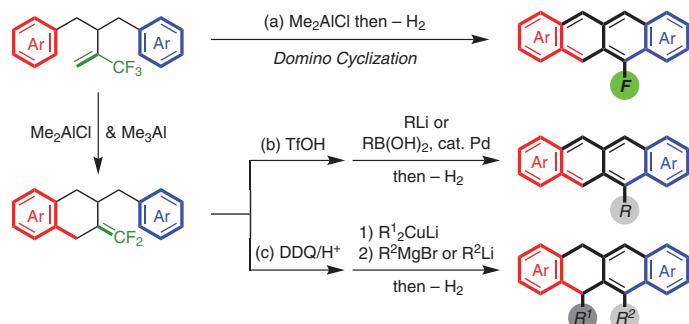
**Synthesis**

*Synthesis* 2022, 54, 3883–3898  
DOI: 10.1055/s-0037-1610791

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**Construction of Substituted [4]Acene Frameworks Based on Double Cationic Cyclizations of Fluoroalkenes****Special Topic**

3883

**Synthesis**

*Synthesis* 2022, 54, 3899–3905  
DOI: 10.1055/a-1504-8924

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**Synthesis of Cyclic Phosphinates by Microwave-Assisted Ionic-Liquid-Promoted Alcoholysis****Special Topic**

3899

